

**City of Mountain View
Community Services Department
Parks Division
Pathway Project
2005**

General Project Description

These specifications are for the improvements of existing pathways at Cuesta and Stevenson Parks. Bid alternates are requested for Eagle and Cuesta Parks. Improvements include corrective asphalt concrete (AC) paving, PCC concrete pathways and demolition of existing pathways, header board and necessary base.

The Contractor with the lowest bid will be awarded the project.

Responsibilities of Contractor

1. All bidders must attend a prebid meeting specified by the City to ensure the scope of work and to resolve any questions regarding materials, inspection, construction, workmanship, and responsibility of the Contractor and responsibility of the City.
2. All measurements listed are approximate. Bidders must fill out the enclosed bidding schedule and submit a unit price for each item listed and payment will be made based upon the lump sum grand total.
3. The Contractor Job Foreman, who must be on site at all times during this construction project, must attend a mandatory preconstruction meeting specified by the City to review work details and to resolve any questions regarding scheduling, specifications, materials, traffic control, inspection, construction, workmanship, responsibility of the Contractor and responsibility of the City.
4. The Contractor shall be responsible at all times for the protection of the area under construction as specified in the City of Mountain View Standard Provisions and the Caltrans Standard Specifications. The Contractor shall keep a minimum number of the following items on site for the duration of the work: 25 construction barricades, 100 cones, "Caution" tape and flagging.
5. Any damage to newly renovated sites shall be the responsibility of the Contractor until the City accepts the project.
6. The Contractor shall be responsible for any liability or claims arising from negligence of his/her employees, agents or subcontractors and must meet City's Comprehensive General Liability and Workers Compensation Insurance requirements.
7. The Contractor shall provide necessary safeguards and emphasize caution against injury to the general public and defacement or damage of their property.

8. The Contractor shall provide for all traffic control and signage at each work site.
9. The Contractor shall be responsible for any defacement or damage to existing sites and shall restore them to their original condition if she/he defaces or damages any site.
10. The Contractor shall make every effort to minimize damage to existing irrigation systems and notify the inspector of any damage. The Contractor will repair excessive damage to the irrigation systems.
11. The Contractor shall ensure that pavement restoration conforms to existing pavement width, grade and texture, unless otherwise noted.
12. The Contractor shall prime coat the aggregate base or tack coat to existing asphalt concrete prior to installation of new asphalt concrete.
13. The Contractor shall be responsible for any damage to his/her equipment left at the work site.
14. The Contractor shall give the City five (5) working days notice prior to commencement of any construction work.
15. The Contractor shall contact the City Inspector for approval prior to the start of each segment of required work. For example: oil coating, overlay paving, AC paving, etc.
16. The Contractor's work schedule shall be Monday through Friday between the hours of 7 a.m. and 3 p.m., unless otherwise authorized by the City.

Responsibilities of the City

1. The City shall be responsible for removal or repair of irrigation systems obstructing the project.
2. The City shall be responsible for providing demarcation of areas to be renovated.
3. The City shall provide an Inspector(s) selected by the Community Services Department to manage this project.
4. City restrooms are available at the park.

Commencement of Work

1. Authorization to begin work will be given by the City at the Preconstruction Meeting, provided the Contractor has received a purchase order from the City and the Contractor's insurance certificates have been furnished to the City.

2. All construction work specified on this contract must be completed within twenty-five (25) City working days from date of purchase order or approved date from the City inspector.
3. All construction work shall be performed on City working days only. (Weekends and City holidays are not permissible.)
4. The City reserves the right to delete portions of work to be performed in the contract based on available project funding.

**City of Mountain View
Community Services Department
Parks Division**

**STANDARD SPECIFICATIONS
FOR ASPHALT CONCRETE**

REMOVAL OF EXISTING A/C

1. The Contractor will be responsible for confirming the thickness of the asphalt to be removed and taking that info into consideration when bidding the project in regards to the thickness of the replacement material.

Root Removal

1. The Contractor shall be responsible for cutting and removing all roots that have caused an upheaval in the pathway surface. Removal shall be in such a manner that the root is cut out cleanly (minimum of 4") from the pathway. In cases where the root or its removal has caused subbase disturbance, these areas are to be cleaned and sufficiently backfilled with aggregate subbase and compacted to a density of not less than 95 percent (95%).

Header boards

1. Header boards shall be installed at all locations shown on the walk-through. Header boards shall be 2"x 6" Trex Header boards. (Color brown to be approved by Inspector.) Exterior grade 2 ½ inch deck screws should be used.
2. Stakes shall be construction 2"x 2" redwood, neatly pointed, driven vertically (1" below header top), located at butt joints and elsewhere, spaced not over 5' on centers and securely screwed to the header boards. Header boards shall be installed on undisturbed earth compacted soil or base rock.
3. When header boards are installed along unprotected edges of pavement, the top edges of the header boards shall conform to the line and grade of existing pavement. Header boards shall be 2" x 6" unless otherwise noted and shall be held in place with 2" x 2" stakes of lengths necessary to extend 14" into solid ground.
4. Header boards are to be installed prior to AC placement. Care is to be taken not to cover header boards with new asphalt or sealer.

5. Where the use of bender boards are necessary to conform to a radius, they shall be joined in a manner as to stagger the joining pieces to prevent separation (18" min. staggering distance).

Pathway Construction and New Asphalt Replacement

1. Pathways shall conform to existing pathway widths (constructed of Class 2 R value 78 min.), 4" thick aggregate base (with a relative compaction of not less than 95 percent as determined by Test Method ASTM D5770-78) and 3" of 1/2" fine mix asphalt concrete applied under the Standard Provisions of the City of Mountain View. Aggregate base areas shall receive a prime coat.
2. Pathways shall be so constructed that the surface level is the same height as surrounding pathway grades, with a center crown not less than 1/2" for a slope of 1 percent across the path to provide adequate drainage.

Overcoat Sealing

1. Overcoat sealing shall be Poly-Kote Tri American T1000 or equivalent "overcoat" diluted 50% on new AC and 15% on old AC.
2. All overcoat sealing shall be done no sooner than 14 days after the new AC has been placed.
3. Overcoat sealing work may be inspected and tested by the City Inspector at any time to assure that the sealing is being properly installed according to the specifications listed in this document.

Composition

Poly-Kote TA-1000 or equivalent should be a special blend of asphalt emulsion, mineral fillers, fiber and polymer for use on parking lots, driveways, playgrounds, tennis courts and other asphalt surfaces. Poly-Kote TA-1000 is formulated to fill voids, provide a smoother black surface and protect asphalt surfaces from possible water damage.

POLY-KOTE-1000 OR EQUIVALENT CONTAINS NO ASBESTOS OR COAL TAR

Physical Properties

Poly-Kote TA-1000 or equivalent meets or exceeds the following specifications:

Penetration of base asphalt	40 pen. Max	ASTM D-5
Residue at 300-400 degrees f	55-65%	
Cone penetration at 77 degrees f	400-750 dmm	ASTM D-217
Density lbs per gallon at 60 degrees f	10-11	

Color (cured film)

DEEP BLACK

Surface Preparation

Broom, power blowers and/or water jet shall be used to clean surface of all dirt, sand and other loose debris. Gas, grease and oil spots shall be cleaned by scrapers and/or suitable detergents. Prime contaminated areas with Oil-Seal TA-100 or equivalent prior to application of Poly-Kote TA-1000 or equivalent. Remove all vegetation from cracks, curbs and gutters and apply an appropriate weed killer. Fill cracks ¼" or larger with Crackfiller TA-300 S/M or equivalent. Remove and replace damaged asphalt using "Hot-Mix" asphalt concrete. On surfaces that are excessively rough or dusted, a Prime Coat consisting of 1 part SS-1H and 4 parts water shall be applied at a rate of .05 -.10 gallons per square yard.

Application

Poly-Kote TA-1000 or equivalent shall be mixed to a uniform consistency using potable water (not to exceed 20% by volume) to obtain a semi-fluid and free- flowing consistency. Poly-Kote TA-1000 or equivalent shall be applied evenly and uniformly in parallel lines and spread immediately by use of brooms, squeegees or mechanical applicators. (Poly-Kote TA-1000 or equivalent can be sprayed applied with appropriate equipment.) Two or more applications may be required depending on surface conditions or desired result. Allow first coat to dry completely before applying the second coat. For best results in "hot" weather, dampen the surface with water prior to the first application of Poly-Kote TA-1000 or equivalent. The second application of Poly-Kote TA-1000 or equivalent may be applied when normal walking and/or mechanical application equipment will not "scuff" the surface. For increased "filling capacity" and "toughness," add 1-5 lbs silica sand as well as 1-5% TA-200 to each gallon of Poly-Kote TA-1000 or equivalent. The final application of Poly-Kote TA-1000 or equivalent may be applied with or without sand or latex depending on surface texture desired. (Refer to mix design chart.)

MIX DESIGN

Mix materials in the following order, Poly-Kote TA-1000 or equivalent, water, sand and Poly-Kote 200 additive, if applicable. The mix designs below are intended as a guideline for approved application practices. Actual may vary with temperature, humidity, surface conditions and/or desired results.

SUGGESTED MIX DESIGNS

SURFACE	TA-1000 (GALS)	WATER (GALS)	SAND (POUNDS)	TA-200 (GALS)	TOTAL MIX (GALS)
SMOOTH	100	20	0	0-5	120-125
MEDIUM	100	20	100	1	126
ROUGH	100	25	300	3	143

VERY ROUGH	100	30	500	5	160
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COVERAGE

The following rates are based on two applications of Poly-Kote TA-1000 or equivalent prior to dilution. Rates will vary depending on surface conditions and/or desired results.

SUGGESTED APPLICATION RATES

SURFACE	APPLICATION RATE PER 1000 SQUARE FEET
SMOOTH	20 GALLONS
MEDIUM	30 GALLONS
ROUGH	40 GALLONS
VERY ROUGH	45 GALLONS

Cure Time

Allow Poly-Kote TA-1000 or equivalent to dry 24 hours prior to vehicle traffic. This will vary depending on weather conditions, temperature, application method/rates and “shaded” areas.

Cleanup

Water will remove Poly-Kote TA-1000 or equivalent from tools and equipment prior to drying. A suitable solvent is required to remove dried materials.

Packaging

Poly-Kote TA-1000 or equivalent is available in bulk, 53-gallon drum or 5 gallon pail.

Precautions

- When sealing over COAL TAR or when adhesion to a smooth surface is in doubt, apply a TEST SAMPLE and evaluate or consult a Tri-American, Inc. representative.
- Poly-Kote TA-1000 or equivalent shall not be applied during or when rain is imminent.
- Air temperature shall be 50 degrees f. and rising prior to application.
- Do not store in temperatures exceeding 100 degrees f.
- Protect containers from direct sunlight.
- Keep away from children.
- Protect from freezing.

PCC CONCRETE SPECIFICATIONS

Concrete Replacement

1. Scope

In general, the work of this bid alternate item involves the placement of concrete pathways/curbs located at Eagle Park.

2. Materials

Concrete shall be "Portland Cement Concrete" of the City of Mountain View standard specifications. Curbs and pathways shall be type "B" 5 sack, 2500-PSI minimum with a combined aggregate grading of 1 1/2" Max. Concrete thickness (6inches) shall conform to existing pathway. Concrete shall be colored San Diego Buff.

3. Dowels/Installation

Steel dowels shall conform to ASTM Designation A615. When existing concrete pathways are to be removed and replaced, the new concrete is to be tied to the remaining pathway section with dowels. The dowels shall be No. 4's with a minimum length of nine (9") inches and shall be installed at eighteen (18") inches on center along the back on the remaining walk. The dowels are to be inserted to a minimum penetration of four (4") inches into the remaining walk and shall fit tightly into the existing concrete.

4. Bar Reinforcement

Bar reinforcement shall be #4 18 inches on center no closer that 3 inches from the edge and no farther than 6 inches. 1 1/2 inch dobes need to be put under the bar.

5. Existing Construction

Where the plans provide for the reconstruction of a portion of an existing pathway, the existing section shall be cut to a minimum of one and one-half (1 1/2 ") inches with an abrasive-type saw at the first scoring line at or beyond the planned joint and the entire section to be reconstructed shall be removed. The new work shall adjoin the old work at this line. If the old work is damaged beyond this line in removing the old concrete, a new line will be cut at the next score line beyond the line of damage and the damaged concrete shall be removed and replaced at no additional cost. Where new concrete work conforms to existing concrete work, steel dowels consisting of No. 4 reinforcement bars shall be placed in accordance with dowel installation specifications.

6. Forms

Forms shall be true and shall have a smooth, straight upper edge. Metal forms may be used upon approval by the inspector.

Timber forms shall surfaced on the side placed next to the concrete and shall not be less than one and one-half (1 1/2") inches thick after being surfaced except on curves where laminated timber forms, benders or thin plank forms may be used.

Front face forms shall not be removed in less than two (2) hours after the has been placed. In no event shall forms be removed while the concrete is sufficiently plastic to slump. Side forms for walkways shall not be removed in less than thirty-six (36) hours after the concrete has been placed.

7. Subgrade Preparation

The subgrade shall be constructed true to grade and cross-sectioned as shown on the plans. The required thickness of aggregate subbase shall be placed in accordance with the standard details and compacted to ninety (90%) percent relative compaction under the walkway as tested in conformance with Test Method No. California 216.

8. Placing Concrete

No concrete shall be placed until the forms have been checked by the Inspector. No concrete shall be placed when the air temperature is below forty (40) degrees Fahrenheit or during rain. During weather when frosts may be expected, the Contractor shall carefully cover recently deposited concrete with burlap, straw or provide for other approved curing method. No concrete shall be placed within three (3) hours of sunset. Before placing concrete, the aggregate base or subbase shall be properly moistened with water and the form faces shall be oiled.

Concrete shall be placed and compacted in forms without segregation. After placing, the concrete shall be consolidated sufficiently to produce a dense mass, struck off and floated. Final finishing operations shall not proceed until all bleed water has evaporated from the surface. Sprinkling of dry concrete to absorb excessive surface moisture shall not be allowed.

Concrete thickness shall conform to existing pathway.

The fresh concrete shall be struck off and compacted until a layer of mortar has been brought to the surface. The surface shall be finished to grade and cross section with a wood or aluminum float, trowled to a dense, hard, smooth finish with a steel trowel and finished with a fine wet and medium brush with brush strokes transverse to the line of traffic.

The finished surface shall not vary more than 0.01 foot (0.01') from a ten foot (10') straight edge, except at-grade changes and the finished surface shall be free from blemishes.

Expansion Joints, Control Joints and Score Marks

Expansion joints shall be placed in the concrete walkways at not more than fifty foot (50') intervals and at each side of driveways and at all returns. Expansion joints shall be placed at right angles to curbs or walkway line and extend through the entire thickness of the concrete. Where walkway is constructed against concrete curbs, the joints shall be in line with the joints through the curb. Concrete adjacent to expansion joints shall be finished with an edger tool.

Expansion joints shall be placed around utility poles, drop inlets and hydrants so that no concrete is in contact with the accessory.

Where electroliers are located back of walkway, expansion joint material shall be placed at the back of the walkway between the walkway and the electrolier. Bases for the electroliers within the walkway shall be completely separated from the walkway by felt roofing material.

Control joints, scored at least one-fifth ($1/5$) the depth of concrete being placed, shall be constructed at intervals not to exceed ten feet (10') in concrete walkways. The width of the control joints shall not exceed one-fourth inch ($1/4"$) and the control joints shall be finished with a "T" bar. All joints shall be scored at right angles to the walkway line.

Maximum delay between successive pours shall not exceed the time of initial set unless a construction joint is installed.

Curing

As soon as the concrete is set, it shall be cured for a period of at least seventy-two (72) hours by applying a suitable cover that will keep all exposed surfaces continually damp or by spraying with an approved impervious membrane curing compound.

The Contractor shall protect all new concrete from damage, including vandalism and graffiti marks. The Contractor shall keep all equipment off new or existing walkways. Repairs shall be made by removing and replacing the entire unit between score lines or joints. All discolored concrete shall be cleaned to a uniform color. Repairs and cleaning of new concrete shall be at the expense of the Contractor.

General Precautions

1. Weather limitations—No part of the construction involving the application of Sealer shall take place during or just prior to rainfall. Air and ground temperature shall be at least 50 degrees Fahrenheit and rising.
2. Curing time—As soon as any application is dry to the touch and will not scuff under normal walking, another application can be made. Complete curing will probably take 24 hours in warm clear weather.

CITY OF MOUNTAIN VIEW

VENDOR: _____

P. O. #: _____ Acct. #: _____

VENDOR #: _____

APPROX QUANTITY	UNIT	DESCRIPTION	UNIT PRICE	EXT. PRICE
		Cuesta Park (Areas, 1,2 and 3)		
2,302	SQ.FT.	NEW A/C as per attached specification.		
2,302	SQ.FT.	REMOVAL OF EXISTING A/C AND ROOTS, as per attached specification.		
514	L.N.F.	REPLACE HEADER BOARD, as per attached specifications.		
		Stevenson Park (Area 1)		
1,700	SQ.FT.	NEW A/C, as per attached specification.		
1,700	SQ.FT.	REMOVAL OF EXISTING A/C AND ROOTS, as per attached specification.		
400	L.FT.	REPLACE HEADER BOARD, as per attached specifications.		
		Stevenson Park (Area 2)		
182	SQ.FT.	REMOVAL OF EXISTING A/C AND ROOTS, as per attached specification.		
182	SQ.FT.	PCC CONCRETE PATHWAY, as per attached specifications.		
		Stevenson Park (Area 3)		
688	SQ.FT.	CRACK FILL AND OVERCOAT SEALING, as per attached specifications.		
		Stevenson Park (Area 4)		
3,430	SQ. FT.	CRACK FILL AND OVERCOAT SEALING, as per attached specifications.		
			TOTAL PROJECT COST	
		Bid Alternate 1 Cuesta Park (Area 4)		
2,130	SQ.FT.	NEW A/C as per attached specification.		
2,130	SQ.FT.	REMOVAL OF EXISTING A/C, as per attached specification.		
426	L.N.F.	REPLACE HEADER BOARD, as per attached specifications.		

			TOTAL PROJECT COST	
		Bid Alternate 2 Eagle Park Areas 1, 2 & 3		
1,400	SQ.FT.	REMOVAL OF EXISTING DG as per attached specification.		
1,400	SQ.FT.	PCC CONCRETE PATHWAY, as per attached specifications.		
			TOTAL PROJECT COST	

General Instructions

- A. Traffic: The Contractor shall protect the work area from traffic during all operations and for twenty-four (24) hours after the finished surface has dried completely.
- B. Cleanup: Upon completion, the Contractor shall remove all containers, surplus materials and debris and leave the site in a clean, orderly condition acceptable to the City. All splatters shall be removed prior to acceptance.
- C. Guarantee: The Contractor shall guarantee materials and/or workmanship for a period of one (1) year from acceptance.
- D. Disposal: All demolition rubble, earth, debris or excess material resulting from the Contractor's operations shall be disposed of off site in a safe and legal manner at the Contractor's expense.
- E. Inspection: All work done and all material used shall be subject to inspection and approval by the Shoreline Division Inspector. Inspection of the work done and materials used shall not relieve the Contractor from any of his obligations to fulfill this contract as described. Defective or unsuitable materials shall be removed and made good notwithstanding that such defective work or material has been previously overlooked by the City and estimated or accepted for payment.
- F. Working Hours: Normal working hours for the City Shoreline Division Inspector is 7:30 A.M. to 4:00 P.M., Monday through Friday. The cost of overtime for City inspection will be charged to the Contractor if the Contractor works before 7:30 PM. or after 4:00 PM., or on Saturday, Sunday, or holidays. The Contractor shall not work on the site outside the normal working hours unless prior written approval is obtained from the Inspector. The Contractor shall diligently pursue the work to completion within 30 working days. This time frame may be adjusted depending on climatic conditions at the sole discretion of the City. All questions relating to this work should be directed to Jack Smith, Capital and Environmental Program Supervisor.